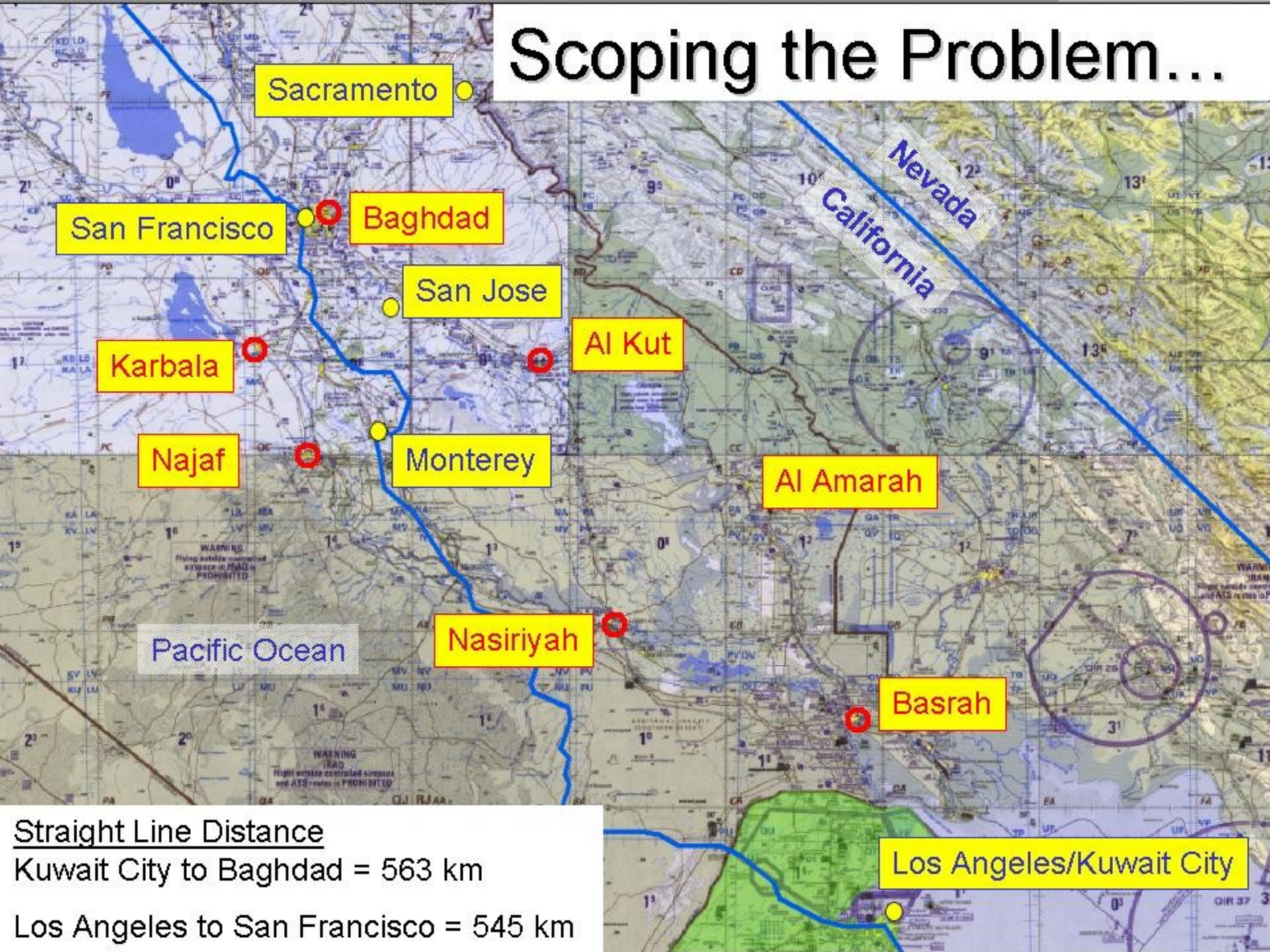
Assault Amphibian Vehicles (AAVs) in 1st Marine Division for Operation Iraqi Freedom

Scoping the Problem…



Straight Line Distance

Kuwait City to Baghdad = 563 km

Los Angeles to San Francisco = 545 km

I MEF Combat Power - 20 Mar 03

I MEF CE

1st Mar Div
- 3 x RCT
- 4 x Artillery Bn – 72 x M198
- 2 x Tank Battalion – 116 x M1A1
- 2 x Light Armored Recon Bn - 244 x LAV
- 2 x Combat Engineer Battalion

3d MAW
- 5 x VMFA (60 x F/A-18C/D)
- 5 x VMA(-) (64 x AV-8B)
- 3 x VMGR(-) (18 x KC-130)
- 5 x HMM(-) (56 x CH-46)
- 3 x HMH (48 x CH-53E)
- 3 x HMLA (54 AH-1W, 27 x UH-1N)
- 2 x VMU
- 2 x VMAQ (10 x EA-6B)
- TACC
- TAOC
- DASC
- 5 X MWSS

TF Tarawa
- 1 x RCT
- 1 x Arty Bn (-)
- 1 x LAR Co – 26 x LAV
- 1 x Tank Co - 14 x M1A1

FSSG (-)
- 3 x CSSG
- 4 x CSSB
- 7 x CSSC
- 3 x ESB
- 1 x TSG (-)

MEG
- 4 x NMCB
- 1 x NCFSU

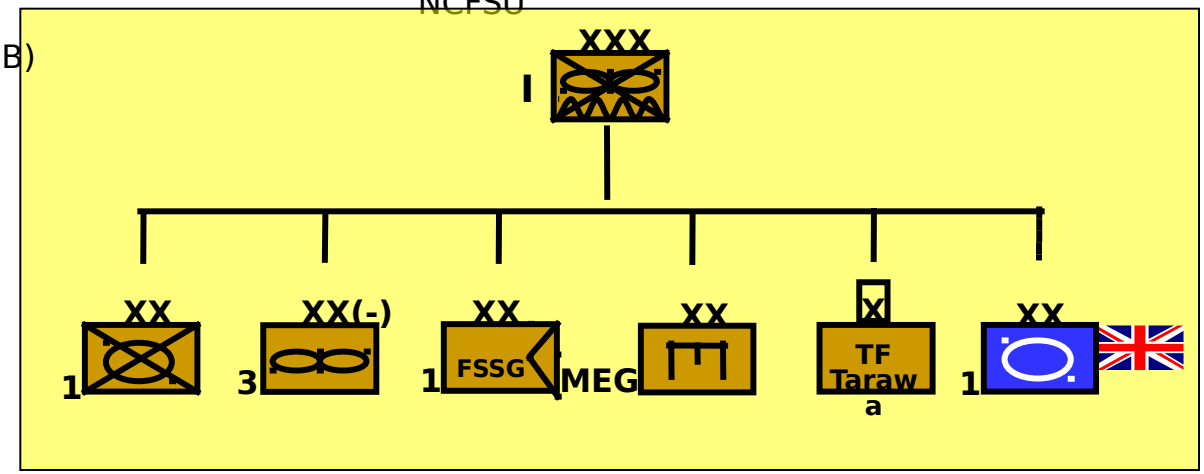
1 (UK) Armor Division

1 x AR Bde
- 4 x Battle Groups (2 armor/2infantry)
- 1 x Artillery Bn (4 Btry x 8 AS-90 155MM)
- 1 x Engr Regt
- 1 x Recce Squadron

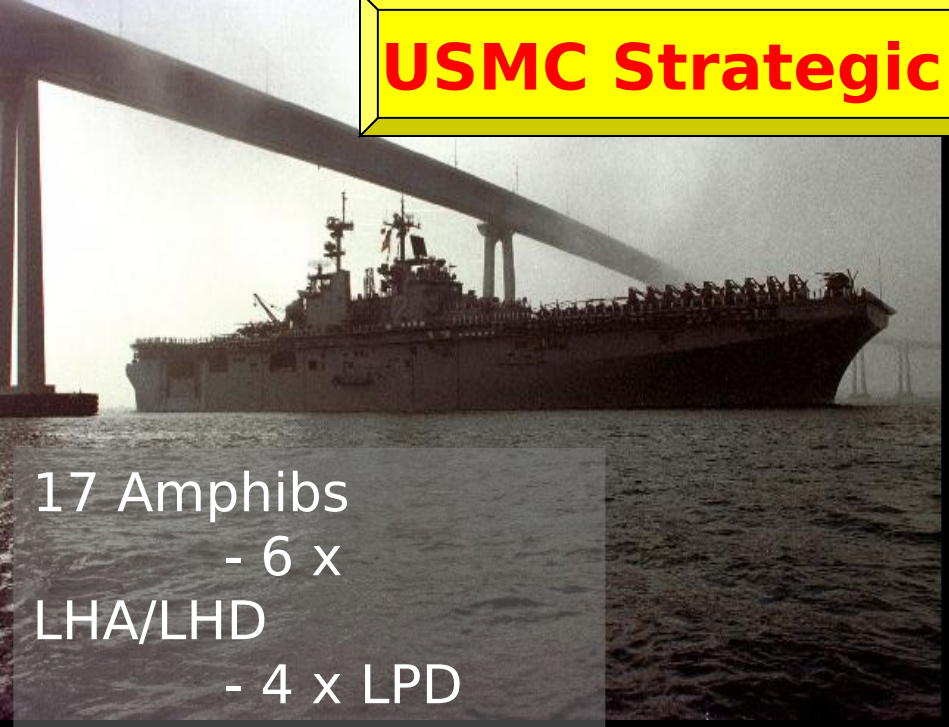
1 x AAslt Bde
- 2 x Para Bns
- 1 x Lt Inf Bn
- 1 x Artillery Bn (18 x 105mm)
- 1 x Assault Aviation Co.
- 1 x Engr Regt
- 1 x Scout Squadron
- 1 x AD Btry

1 x Cdo Bde (-)
- 2 x Cdo
- 1 x Artillery Bn (12 x 105mm)

MEU (TACON to 3 Cdo Bde)



USMC Strategic Agility in 1003V



17 Amphibs
- 6 x LHA/LHD
- 4 x LPD
- 7 x LSD

Plan: 11 MPS ships – 18 day download

Execution: 11 MPS ships – 16 day download

250 x C-5

4 x LMSR
5 x FSS
3 x RO/RO
2 x T-AVB
1 x TA-H

3rd Aslt Phib Bn (rein) Annex

3rd Assault Amphibian Battalion (Rein), 1st Mar Div

Headquarters & Service Co, 3rd Aslt Phib Bn

Headquarters & Service Co, 2nd Aslt Phib Bn
Headquarters & Service Co, 4th Aslt Phib Bn
101 st Chemical Company
Chemical Det. H&S Bn, 1st MarDiv
Comm Det, H&S Bn, 1st MarDiv
MP Company, H&S Bn, 1st MarDiv
MP Company, H&S Bn, 4th MarDiv

AAV Distribution

564 AAVs from 8 different locations

8 x Mechanized Infantry Battalions (46 AAVS @)
32 x Command Groups (2 AAVs @)
6 x MK154 Obstacle Clearing Detachments (4 AAVs @)
7 x Battle Damage Assess & Repair Teams (2 AAVs @)
2 x General Support Platoons (12 AAVs @)
Class VII resupply block (70 AAVs)

Tactics, Techniques and Procedures

All AAV companies & Dets with the exact same T/O & T/E

Fix forward at all costs

6 hour rule

GS replacements

Class VII swap outs when possible

Night repairs done by NVG/red lense

Armor Fabrication

B103

Class IX problem

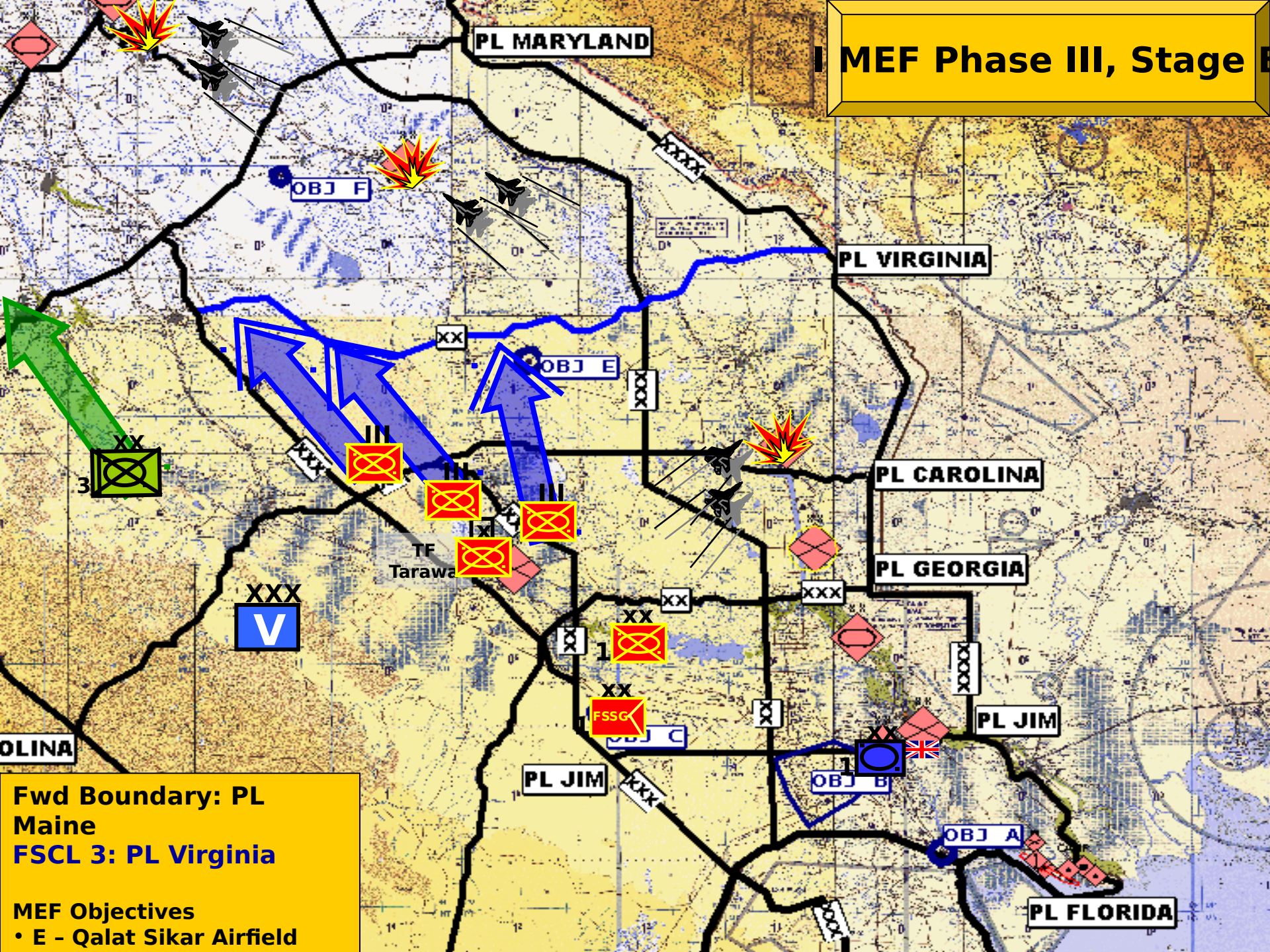
Two different configurations of AAVs

- AAV7A1 (Straight Leg)
  - older
  - primarily on MPF
  - no usage data
- AAV RAM (new engine, suspension & transmission)
  - latest version
  - in use with FMF
  - many subsystems still under warranty

Class IX mitigation

- Non refundable A stock
- Large Company Pre-expend Bins (PEBs)
  - high usage / low cost items
  - under $50 each
- Purchase a large “Bn shop overhead”
  - consumables, air & oil filters, safety wire, sealant, etc.
- Well stocked machine shop trailer
  - Extensive welding stock
  - Additional tools
- Creation of the BDARs
  - AAVR7 & chase AAVP each
  - Seasoned SNCOs
  - Well supplied and positoned on the battlefield
- Class VII resupply block (70 AAVs)
  - Send 4 to each infantry battalion
  - Program 12 to be brought forward at D+4

LANCE CPL. JENNIFER KRUSEN


I MEF Phase III, Stage
PL MARYLAND
OBJ F
PL VIRGINIA
OBJ E
PL CAROLINA
PL GEORGIA
TF Tarawa
FSSG
OBJ C
PL JIM
OBJ B
OBJ A
PL FLORIDA
Fwd Boundary: PL Maine
FSCL 3: PL Virginia
MEF Objectives
• E – Qalat Sikar Airfield

"When we saw the 'tanks' floating across the river, we knew we could not win against the Americans."

– Iraqi Enemy Prisoner of War
After surrendering to the 1st Marine Division

Our Lesson Learned

POL for MPF refit was a huge problem.

Burned through our A stock before even crossing the LOD.

Abandoning dead AAVs not an option.

Welding & fabrication was in big demand.

(HUMMV gun mounts and M198 trails)

BDAR Teams a huge multiplier.

GS AAVs controversial, but it worked well.

GS Decon and TMC were complimentary to repair mission.

Consolidation of AAV Battalions was a good idea for OIF, but not ideal for a doctrinal change.

Lessons Learned for CV Conference

- Stop making vehicles so damned complicated that every repair requires depot rebuild or contractor support
- Component replacement only works if you have a replacement.
- You know the Marine/Soldier is going to find a way to fix it forward, so make it easy on him/her.
- Build systems that can be bypassed.
- Nurture that initiative. Empower them through the design of the vehicle.